Title (en)

NUCLEIC ACID ISOTHERMAL SELF-AMPLIFICATION METHOD

Title (de)

VERFAHREN ZUR ISOTHERMISCHEN NUKLEINSÄURESELBSTVERSTÄRKUNG

Title (fr)

PROCÉDÉ D'AUTO-AMPLIFICATION ISOTHERMIQUE D'ACIDE NUCLÉIQUE

Publication

EP 3470529 B1 20220518 (EN)

Application

EP 17812611 A 20170607

Priority

- CN 201610420179 A 20160613
- CN 2017087414 W 20170607

Abstract (en)

[origin: EP3470529A1] Provided is a nucleic acid isothermal self-amplification method comprising, adding suitable palindrome complementary sequences at both ends of a target template to form a stem-loop structure spontaneously, and providing reagents and conditions as needed to perform self-amplification. The method does not require addition of additional amplification primers. The reagent comprises a DNA polymerase having a strand displacement activity. The method does not rely on exogenous amplification primers for amplification, has a constant amplification temperature without a complex temperature control equipment, and achieves rapid amplification. The amplification product is a long single-stranded DNA of a continuous complementary sequence and can be applied to special occasions. In addition, the amplification has no GC bias.

IPC 8 full level

C12Q 1/6844 (2018.01)

CPC (source: CN EP US)

C12N 9/1252 (2013.01 - EP US); **C12N 15/86** (2013.01 - US); **C12Q 1/68** (2013.01 - EP US); **C12Q 1/6844** (2013.01 - EP); **C12Q 1/6851** (2013.01 - US); **C12Q 1/686** (2013.01 - CN); **C12Q 1/6869** (2013.01 - US); **C40B 40/08** (2013.01 - US); **C40B 50/06** (2013.01 - CN); C12N 2310/20 (2017.04 - US); C12N 2310/531 (2013.01 - US); C12Q 2600/16 (2013.01 - US)

Citation (examination)

US 2012196279 A1 20120802 - UNDERWOOD JASON [US], et al

Cited by

US11649480B2; US11390904B2; US11560589B2; US11542551B2; US11186857B2; US11352664B2; US11459606B2; US11725205B2; US10851409B2; US11168363B2; US11261487B2

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